

## Remarks

### Rejections under 35 U.S.C. § 112

The Examiner has rejected claims 1 – 15 as being indefinite. The Examiner asserts that claim 1 is vague and indefinite in that it is unclear how a promoter that is regulable by a repressor can be considered “constitutive”. In order to more clearly describe the invention claims 1, 2, 4, 5, and 8 have been amended to remove the term “constitutive” and to indicate that transcription from the promoter is active in the absence of a repressor, which is the meaning to be given to the term “constitutive” in light of the specification. The term “constitutive” was used as a convenient means of distinguishing the “constitutive” promoters from, for example, promoters from which transcription is only active in the presence of an inducer or activating agent. As is evident from the specification, the term “constitutive” was not intended to indicate that the “constitutive” promoters are not repressible.

As described on p. 2, line 30, through p. 3, line 3, the adjustable threshold switch of the invention includes a construct comprising a first regulatory gene ( $R_1$ ) that is expressed from a first, inducible promoter ( $P_1$ ), and a second construct comprising a second regulatory gene ( $R_2$ ) that is expressed from a “constitutive” promoter. As described on p. 3, lines 7-9, in a default first expression state, transcription from the “constitutive” promoter is active, and transcription from the inducible promoter is inactive. As described on p. 3, lines 3 and 4, a product of the first regulatory gene represses expression of the first regulatory gene (which is expressed from the “constitutive” promoter). Thus it is evident that transcription from the “constitutive” promoter is active in the default state (in the absence of repressor), but can be repressed by the repressor (the product of  $R_2$ ). As the foregoing description indicates, the term “constitutive promoter” is therefore used to indicate that transcription from the promoter is active in the absence of a repressor. Applicants submit that replacing the term “constitutive” with its meaning in light of the specification renders the claims definite.

The Examiner has asserted that claim 10 is vague and indefinite in that the metes and bounds of the term “disposed within” are unclear. As suggested by the Examiner, the term “disposed within” has been replaced by the term “comprised within”, which is intended to have similar scope.

The specification has been amended to refer to co-pending applications by serial number rather than attorney docket number. In addition, line 29 on p. 6 has been amended to correct an obvious typographical error. Line 30 on p. 33 has been amended to improve the grammar without changing the meaning.

In light of the foregoing Amendment and Remarks, Applicants respectfully submit that the present case is in condition for allowance. A Notice to that effect is respectfully requested.

If, at any time, it appears that a phone discussion would be helpful or if questions arise regarding the amendment proposed above, please do not hesitate to contact the undersigned at (617) 248-5071.

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Respectfully submitted,



Monica R. Gerber  
Monica R. Gerber, M.D., Ph.D.  
Registration Number 46,724

Choate, Hall & Stewart  
Exchange Place  
53 State Street  
Boston, MA 02109  
(617) 248-5000  
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